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L6: Entry 1 of 1   File: USPT   Oct 15, 2002

DOCUMENT-IDENTIFIER: US 6466928 B1
TITLE: Method and apparatus for idea development and evaluation

Abstract Text (1):
Disclosed are apparatus and methods for evaluating a business proposal in which a
computer is used to perform the steps of presenting questions regarding the
business proposal, using information gathered from responses to these questions to
determine a score for the proposal, and then providing this information and score
for evaluation of the proposal.

Brief Summary Text (4):
These existing new product development processes have further drawbacks. They often
require, for example, costly cross-functional expert teams to sufficiently develop
ideas into workable concepts. In addition, they often lack an efficient and
consistent way to present information to high-level managers whose time may be
limited. Finally, to the extent these processes lead to a conclusion regarding the
possible success of an idea, the result is merely a go/no go decision. Such a
result leaves high-level managers without a way to qualitatively assess the bases
for that decision.

Detailed Description Text (5):
The Idea Development Process provides a number of benefits that demonstrate its
usefulness. First, it forces the IG to complete the initial phases of the process
before involving the Idea Evaluator in evaluating the concept for validity. This
saves resources and time because Idea Evaluators typically tend to be senior-level
managers whose time is both limited and expensive. Restructuring the process of
developing ideas to move the contributions from Idea Evaluators to the latter
stages of the process eliminates much of the overhead expenditures typically
required for Fuzzy Front End analysis.

Detailed Description Text (6):
Second, the Idea Development Process is implemented to allow the IG to complete the
first three phases of the process independently, without the cross-functional
expert teams that typical Fuzzy Front End analysis requires. Those teams often
consume much time, effort and funding. The Idea Development Process offsets the
need for such expert teams by using a pre-determined set of questions which can be
easily understood and completed by the Idea Generator.

Detailed Description Text (7):
Third, presenting the assessed concepts to the Idea Evaluator in a form directly
comparable to other ideas that have been through the process reduces the time
required for the Idea Evaluator to compare and contrast the concepts before making
a final decision. Furthermore, collecting a number of assessed concepts provides
data on the success of the concept after development and market introduction. Idea
Evaluators can later use this data in evaluating similar concept assessments.

Detailed Description Text (11):
The purpose of the Idea Qualification phase is to pre-screen. a new product or

service idea at a very high level. The Idea Qualification phase begins when an IG initiates a software program for the Idea Development Process that displays a form containing high-level questions designed to make certain that the IG has thought through a new idea's marketing, technical, human factors, and <u>business</u> feasibility. The following represent ten typical qualitative questions, denoted by (a), and their counterpart statements, denoted by (b), that the IG quantitatively rates. 1a. What steps have you taken to determine that this idea does not exist today within [company]? 1b. This idea does not currently exist with [company]. 2a. Who would use this product/service idea? Describe the end-user for this idea. 2b. This idea meets specific end-user needs. 3a. What end-user needs would be met with this idea? 3b. End-users for this idea have been identified. 4a. What are the benefits of this idea over existing product/service alternatives to the end-user? 4b. This idea offers significant benefits over existing product service alternatives to the end-user. 5a. How would this idea improve end-user productivity? 5b. This idea would improve the productivity of the end-user. 6a. Who would provide this service/product to the end-user? Describe the service-provider for this service/product idea. 6b. Service providers for this idea have been identified. 7a. What are the benefits for service-provider in offering this product/service idea to end-users? 7b. This idea offers significant benefits over existing product/service alternatives to the service-provider. 8a. What steps have you taken to determine that this idea would succeed in the Marketplace? 8b. This idea would be readily adopted by the Marketplace. 9a. Could this product/service idea be implemented technically today? Describe how this would work. 9b. The technology required to implement this product/service exists today. 10a. Does this product/service idea align with [company]'s current product/service offerings? 10b. This idea is in alignment with [company's] current product/service offerings.

Detailed Description Text (23):
Template 7. Platform/Interface. 1) Describe how this product/service would save <u>time</u> for the end-user. 2) Describe how the interface of this product/service could be developed to best suit the needs of the end-user.

Detailed Description Text (27):
Template 11. Strategic Alignment. 1) Provide at least 3 reasons why this product/service would be appropriate for [company] to develop. 2) Explain how this product aligns with telecommunications industry trends and how it complements [company]'s <u>business</u> focus.

Detailed Description Text (37):
Category 3. Concept Development 1. Solutions to any marketing, technical, human factors, and <u>business</u> issues are very clear at this stage. 2. This concept has been jointly refined by the customer and [company]. 3. The original idea has gone through several refinements to become this stage. 4. This idea has been fully developed in all four areas (marketing, technical, human factors, and <u>business</u>.

Detailed Description Text (41):
Category 5. Technical Feasibility 1. The development of this product/service will require limited technological innovation. 2. This product/service is technically feasible. 3. The technical--aspects exactly how technical issues will be addressed--are very clear. 4. The product/service feature specifications are very clear at this <u>time</u>. 5. The technology required to develop this product/service is currently available.

Detailed Description Text (49):
Category 9. HF Resource Requirements 1. We have the necessary prototyping and testing equipments to develop the user interface for this product/service. 2. We have the necessary skills to develop the user interface for this product/service. 3. The <u>time</u> required to develop the user interface for this product/service is minimal. 4. The deadlines for developing the user interface for this product/service are determined internally to [company]. 5. The information

collection requirements for developing the user interface of this product/service involve a small work effort.

Detailed Description Text (59):
Category 14. Time-to-Market 1. Trained resources are available internally or externally to get this product/service to market. 2. Development time will be short (3-6 months). 3. We can out source the development of this product/service. 4. Third party developers are necessary for deployment of this product/service.

Detailed Description Text (65):
The sixteen Categories are logically separated into four categories each for marketing, technical, human factors, and business disciplines. Marketing includes Categories relating to end-user needs/trends, potential market, concept development, and competitive analysis. The technical factors include feasibility, skill resource availability, synergy with company development strategy, and product or service novelty. Human factors encompasses resource requirements, usability assessment, productivity enhancements, and user interface competitive analysis. Finally, the business discipline includes Categories relating to opportunity, time-to-market, service novelty, and strategic alignment. Each Category contains from four to six rating statements.

Detailed Description Text (70):
Once the IG has completed the Concept Rating phase, the program compiles the resulting quantitative data and creates a graphical representation of the results in the form of generic evaluation model (GEM) charts. Samples of such graphs appear in FIG. 21 as a set of graphs that visually summarize the concept in the marketing, technical, human factors, and business disciplines captured in the Concept Rating phase. The ratings shown on these graphs are based on the ratings given by the IG in the Concept Rating phase. The Idea Evaluator may either view each of the four disciplines individually or all at once on one screen. The Idea Evaluator may also click on any of the axes in a graph to view the original ratings provided in the Concept Rating phase.

Detailed Description Text (71):
Developed by O'Driscoll et al. (1993), the generic evaluation model uses kite plots to display quantitative data to facilitate its interpretation. In this case, the quantitative data is displayed in four GEM charts (marketing 2101, technology 2102, human-factors 2103, and business 2104). Each GEM chart has, in turn, one category represented on one axis. For example, the marketing 2101 chart contains four axes corresponding to end-user needs/trends, potential market, concept development, and competitive analysis.

Detailed Description Text (72):
Meritorious ideas are represented by high ratings which, by the scoring algorithms discussed below, translate into increased distances between the origin and the points on the axes. Therefore, larger diamonds indicate stronger ideas in the discipline represented by the graph. An ideal idea would have relatively large diamond-shaped graphs in all four disciplines--marketing, business, technical, and human factors, as FIG. 1(a) shows. This graphical representation allows one to quickly scan these charts and verify by the shape of the diamond that all the scores from each category appear to be the same.

Detailed Description Text (73):
Such ideal outcomes, however, seldom arise. Consequently, Idea Evaluators must decide on less well developed and ideal ideas. For example, FIG. 1(b) shows graphs presenting a murkier picture. Taking the axes to correspond to those in FIG. 21, the graphs show a stable Business outlook, by virtue of the diamond shape, but a less appealing picture in the other areas. For example, Marketing appears weak in three areas, end-user needs/trends, concept development, and competitive analysis. Technology seems weak in one area, synergy with company development strategy, and

Human Factors looks weak in two areas, usability assessment and productivity
enhancement.

Detailed Description Text (76):
where W.sub.ij represents a weight that can be assigned to a category that may be
of particular importance to a Idea Evaluator, and X.sub.ij represents the
quantitative score assigned to a Category in the Concept Rating phase. The index i
ranges from 1 to 4, representing each of the four GEM charts (marketing, business,
human-factors, and technology). The index j also ranges from 1 to 4, representing
each of the four categories assigned to each GEM chart. In the preferred
embodiment, all categories are weighted equally.

Detailed Description Text (81):
In the Concept Assessment Phase, as well as in the Concept Development and Concept
Rating phases, the program preferably provides the IG with hyperlinks back to any
questions previously answered in the Idea Development Process that pertain to a
current topic. Innovation activities are rarely considered full time jobs, so IGs
will likely be working on their ideas sporadically. Providing hyperlinks to
previous cues allows the IG to build on the idea continuously.

Detailed Description Text (97):
FIG. 15 shows the preferred Home Page 1500 for the Concept Rating phase (step 335
of FIG. 3) of the Idea Development Process. The sixteen Categories of questions are
divided into four subsets: Marketing Analysis 1502, Human Factors Assessment 1503,
Technical Assessment 1504, and Business Assessment 1505. Each listed Category has
an associated progress indicator 1510. The buttons 1520 at the bottom of the screen
allow the IG to quit the program, save or print the idea information, or proceed
with answering the questions in the first Category. The Go To Phases box 1530 in
the upper left portion of the screen 1500 allows the IG to move between phases.
Clicking on Guide button 1540 in Help box 1535 takes the IG to the help screen
shown in FIG. 16, while clicking on Advisor button 1545 takes the IG to a help
screen having the same basic format as the one shown in FIG. 8.

Detailed Description Paragraph Table (1):
APPENDIX A SC Window names: .sub.-- Window Function: .sub.-- SC Card names: Card
Function: Hidden Window Supercard requires that at least 1 window be open at all
time .sub.-- hidden card Supercard requires all windows to have at least 1 card New
Idea Phase Contains all cards for Phase .sub.-- Splash Screen Presents opening
graphic screen Password Asks user if they have a password OpenOrNew Asks user to
OPEN idea or start NEW idea IG info Collects information about Idea Submitter IG
info1 Collects information about Idea Originator IG info2 Collects overview
information about the idea PF.main Home Page for Phase 1 Questions; central
navigation point PF.Q1-PF.Q10 1 Question & related rating statement per card (10
total) ViewResponses Presents text summary of questions, responses and ratings
Development Phase Contains all cards for Phase 2 .sub.-- CD.main Home Page for
Phase 2 Exercise (Templates) CD.T1, CD.T1b, CD.T1c Cards for Template 1 exercise
CD.T2, CD.T2b Cards for Template 2 exercise CD.T3, CD.T3b Cards for Template 3
exercise CD.T4 Cards for Template 4 exercise CD.T5 Cards for Template 5 exercise
CD.T6, CD.T6b Cards for Template 6 exercise CD.T7, CD.T7b Cards for Template 7
exercise CD.T8, CD.T8b Cards for Template 8 exercise CD.T9, CD.T9b Cards for
Template 9 exercise CD.T10, CD.T10b Cards for Template 10 exercise CD.T11, CD.T11b
Cards for Template 11 exercise CD.T12, CD.T12b, CD.T12c Cards for Template 12
exercise Rating Phase Contains all cards for Phase 3 .sub.-- CR.main Home Page for
Phase 3 Rating Exercises CR.arm5-CR.arm8 Cards for ratings in 4 sub-areas of Market
Assessment major area CR.arm9-CR.arm12 Cards for ratings in 4 sub-areas of Human
Factors Assessment CR.arm13-CR.arm16 Cards for ratings in 4 sub-areas of Business
Assessment major area Evaluation Phase Contains all cards for Phase 4 .sub.-- IE
info Collects information about idea Evaluator (Decision Maker) CE.main Home Page
for Phase 4 navigation CE.1 Presents graphical display for Marketing area ratings
CE.2 Presents graphical display for Technical area ratings CE.3 Presents graphical

display for Human Factors area ratings CE.4 Presents graphical display for <u>Business</u> area ratings CE.5 Presents combined graphical display for all ratings areas CE.main2 Provides text field for Idea Evaluator comments Data Stores Phase 1 data for various operations PF.data Holds Phase 1 data and responses for creating summary page and calculating phase 1 idea "filter score" TextFields Stores text for all questions and rating statements .sub.-- 10Questions Stores 10 Phase 1 questions 10Ratings Stores 10 Phase 1 rating statements CDquestions Stores all Phase 2 Template questions and directions MRatings Stores rating statements for Marketing Assessment area TRatings Stores rating statements for Technical Assessment area HFRatings Stores rating statements for Human Factors Assessment area BRatings Stores rating statements for <u>Business</u> Assessment area HelpText Stores all text for on-line Help system (Guide/Advisor/Mentor) .sub.-- Phase1.Guide, Phase2.Guide, Stores Guide information text for Phases 1-4 Phase3.Guide, Phase4.Guide Phase1.Advisor, Stores Advisor information text for Phases 1-4 Phase2.Advisor, Phase3.Advisor, Phase4.Advisor Phase1.Mentor, Stores Mentor information text for Phases 1-4 Phase2.Mentor, Phase3.Mentor, Phase4.Mentor Idea Summary Presents Idea Submitter, Originator, & Evaluator Information .sub.-- Idea Summary Summary of Idea Submitter, Originator, & Evaluator info Idea Summary2 Additional Idea information if available Mentor Window for presenting Mentor information .sub.-- GD1 Card to present Mentor information GD2 2nd version of Mentor information card for certain contexts Advisor Window for presenting Advisor information .sub.-- AD1 Card to present Advisor information AD2 2nd version to Advisor information card for certain contexts Q1 Presents Advisor information about rating 1 (if applicable) Q2 Presents Advisor information about rating 2 (if applicable) Q3 Presents Advisor information about rating 3 (if applicable) Q4 Presents Advisor information about rating 4 (if applicable) Q5 Presents Advisor information about rating 5 (if applicable) Q6 Presents Advisor information about rating 6 (if applicable) Mentor Window for presenting Mentor information .sub.-- MN1 Card to present Mentor information Untitled Non-functional empty Window, used only for development .sub.-- Tool Palette Non-functional, eventually will enable graphics creation .sub.-- Paint Paint tools menu; currently non-functional Draw Draw tools menu; currently non-functional

<u>Detailed Description Paragraph Table</u> (2):
APPENDIX B Variable names: Variable functions: UserLocation Holds the current or most recent location of the user in the VM nodate Indicates whether or not the data saving routines should be executed (values = Yes and No) dataset Holds all idea information when writing to/reading from the Idea Catalog guideset Holds non-idea information when writing to/reading from the Idea Catalog value 1-value 10 Values for 10 Phase 1 Ratings Qbegin, CDbegin, CRbegin, Holds the data on which phases 1, 2, 3, and 4 were begun, respectively CEbegin Qend, CDend, CRend, CEend Holds the date on which phases 1, 2, 3, and 4 were completed, respectively Qstatus, CDstatus, CRstatus, Holds the current completion status of phases 1, 2, 3, and 4, respectively CEstatus (values = New, In Progress, and Completed) Qscore Holds the average value of the 10 phase 1 ratings w11, w12, w13, w14 Importance weightings pre-assigned to the 4 sub-areas in the Market Assessment Area w21, w22, w23, w24 Importance weightings pre-assigned to the 4 sub-areas in the Technical Assessment Area w31, w32, w33, w34 Importance weightings pre-assigned to the 4 sub-areas in the Human Factors Assessment Area w41, w42, w43, w44 Importance weightings pre-assigned to the 4 sub-areas in the <u>Business</u> Assessment Area asw1, asw2, asw3, asw4 Sum of 4 sub-area importance weightings for each of the 4 major Assessment Areas s11, s12, s13, s14 Average rating for the statements in each of the 4 sub-areas in the Market Assessment Area (Phase 3) s21, s22, s23, s24 Average rating for the statements in each of the 4 sub-areas in the Technical Assessment Area (Phase 3) s31, s32, s33, s34 Average rating for the statements in each of the 4 sub-areas in the Human Factors Assessment Area (Phase 3) s41, s42, s43, s44 Average rating for the statements in each of the 4 sub-areas in the <u>Business</u> Assessment Area (Phase 3)

CLAIMS:

1. A method for evaluating a <u>business</u> proposal comprising the steps, performed by a computer, of: presenting a set of predefined questions regarding the proposal; obtaining a set of information about the proposal from responses to the questions; determining a score from the information in the set; determining, from the score, whether the set meets a predetermined minimum specification; and outputting the score and the obtained information for the purposes of evaluating the proposal.

13. A computer for evaluating a <u>business</u> proposal, comprising: means for presenting a set of predefined questions regarding the proposal; means for obtaining a set of information about the proposal from responses to the questions; means for determining a score from the information in the set; means for determining, from the score, whether the set meets a predetermined minimum specification; and means for outputting the score and the obtained information for the purposes of evaluating the proposal.

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L27: Entry 1 of 1   File: USPT   Oct 14, 2003

DOCUMENT-IDENTIFIER: US 6633924 B1
** See image for Certificate of Correction **
TITLE: Object synchronization between objects stores on different computers

Brief Summary Text (4):
As electronic components have continued to become smaller and less expensive,
laptop, handheld, and other portable computers have become more and more popular.
Although a variety of applications can be used with such computers, personal
information managers (PIMs) form an important category of application programs that
are particularly suited for used with portable computers or other portable
information devices.

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L1: Entry 8 of 11   File: USPT   Oct 15, 2002

DOCUMENT-IDENTIFIER: US 6466928 B1
TITLE: Method and apparatus for idea development and evaluation

Detailed Description Text (65):
The sixteen Categories are logically separated into four categories each for
marketing, technical, human factors, and business disciplines. Marketing includes
Categories relating to end-user needs/trends, potential market, concept
development, and competitive analysis. The technical factors include feasibility,
skill resource availability, synergy with company development strategy, and product
or service novelty. Human factors encompasses resource requirements, usability
assessment, productivity enhancements, and user interface competitive analysis.
Finally, the business discipline includes Categories relating to opportunity, time-
to-market, service novelty, and strategic alignment. Each Category contains from
four to six rating statements.

Detailed 7/72-73